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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,759	04/11/2002	Micheal R. Krause	10002164-2	4267

22879 7590 01/13/2005

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EXAMINER

REILLY, SEAN M

ART UNIT PAPER NUMBER

2153

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Applicati n N .</b>	<b>Applicant(s)</b>	
	09/980,759	KRAUSE ET AL.	
	<b>Examin r</b>	<b>Art Unit</b>	
	Sean Reilly	2153	

**-- The MAILING DATE f this communication appears on the cover sheet with the correspondence address --**

**Peri d for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 November 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Request for

Comment 793 – Transmission Control Protocol, hereinafter RFC 793.

2. Regarding claim 1, RFC 793 discloses a distributed computer system comprising:

□ a source endnode including:

a. a source process which produces message data (pg 7, last ¶ continued on pg 8 and pg 24, last ¶, first sentence);

b. a send work queue having work queue elements that describe the message data for sending (pg 24, last ¶ and pg 41, 3<sup>rd</sup> ¶, last sentence);

□ destination endnode including:

a. a destination process (pg 7, last ¶ continued on pg 8);

b. a receive work queue having work queue elements that describe where to place incoming message data (pg 7, last ¶ continued on pg 8);

□ communication fabric providing communication between the source endnode and the destination endnode (inherent; pg 7, last ¶ continued on pg 8); and

□ an end-to-end context at the source endnode and the destination endnode storing state information to ensure the reception and sequencing of message data sent from the

source endnode to the destination endnode thereby permitting reliable datagram service between the source endnode and the destination endnode (Section 2.6 beginning on pg 9).

3. Regarding claim 11, RFC 793 discloses a method of sending message data via a reliable datagram service from a source endnode to a destination endnode in a distributed computer system, the method comprising:

- producing message data with a source process at the source endnode (pg 7, last ¶ continued on pg 8 and pg 24, last ¶, first sentence);
- describing the message data for sending with work queue elements in a send work queue at the source endnode (pg 24, last ¶ and pg 41, 3<sup>rd</sup> ¶, last sentence);
- describing where to place incoming message data with work queue elements in a receive work queue at the destination endnode (pg 7, last ¶ continued on pg 8);
- storing state information in an end-to-end context at the source endnode and the destination endnode to ensure the reception and sequencing of message data sent from the source endnode to the destination endnode (Section 2.6 beginning on pg 9); and
- sending message data via the reliable datagram service between the source endnode and the destination endnode, wherein the reliable datagram service is controlled by the state information stored in the end-to-end context at the source endnode and the destination endnode (Section 2.6 beginning on pg 9).

4. Regarding claims 2 and 12, RFC 793 discloses the source endnode including a network interface controller which packetizes the message data into frames (Section 2.2 beginning on pg 7).

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5. Regarding claims 3 and 13, RFC 793 discloses the destination endnode including a network interface controller which acknowledges receipt of frames sent from the source endnode (pg 6 Reliability section).
6. Regarding claims 4 and 14, RFC 793 discloses the system wherein the network interface controller and the end-to-end context portion in the destination endnode ensures strong ordering of received frames sent from the source endnode, such that the frames are received in a same defined order as transmitted from the source endnode (pg 6 Reliability section).
7. Regarding claims 5 and 15, RFC 793 discloses the system wherein the source endnode retransmits frames that are not successively acknowledged in the reliable datagram service (pg 6 Reliability section).
8. Regarding claims 6-7 and 16-17, RFC 793 discloses generating cumulative and per frame basis acknowledgments (pg 20, last ¶ continued on to pg 21).
9. Regarding claims 8 and 18, RFC 793 discloses the system wherein the end-to-end context stores state information to keep track of sequence numbers to detect out of sequence or missing frames sent from the source endnode to the destination endnode (pg 6 Reliability section).
10. Regarding claims 9 and 19, RFC 793 discloses the system wherein the end-to-end context stores state information to keep track of acknowledgments sent from the destination endnode (pg 6 Reliability section).
11. Regarding claims 10 and 20, RFC 793 discloses the system wherein the end-to-end context stores state information to keep track of time out values (pg 6 Reliability section).

*Conclusion*

12. This office action is made **NON-FINAL**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
December 20, 2004

  
GLENTON B. BURGESS  
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